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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/534,338

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Andreas Goeke

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EXAMINER

PEPITONE, MICHAEL F

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

07/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/534,338	Applicant(s) GOEKE, ANDREAS	
	Examiner MICHAEL PEPITONE	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☒ Claim(s) 2 and 9-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/6/05, 5/10/05, 8/9/06</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of species (i) {the bond between C₁ and C₂ is a single bond} in the reply filed on 4/9/08 is acknowledged. The traversal is on the ground(s) that a single search could be carried out for both species. This is not found persuasive because the single bond species {species (i)} also contains at least one cycloalkane ring, which would require different search protocol from the double bond species {species (ii)}.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

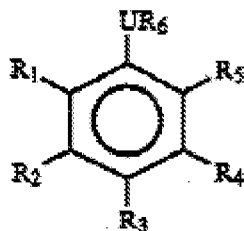
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-4, and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Köhler *et al.* (US 5,387,718).

Regarding claim 1: Köhler *et al.* teaches alkylphenyl alkyl thioethers having the general formula:

Art Unit: 1796



where U represents O or S; and

R₁-R₆ each independently represent an alkyl or aryl group, but R₁-R₅ may each independently represent a functional group other than these, including, e.g., but not limited to, —COOR, —NO₂, —NH₂, —O—CH₂—CH₂—OH, —OH, —CHO, or -halogen; further

R₁-R₅ may be bridged by suitable bifunctional substituents, such as, e.g., —(CH₂)_x—, or —(CH₂)_x—Z—(CH₂)_y— (where Z represents a hetero atom; x=0-7, and y=0-7), or preferably unsaturated substituents such as are characteristic of anellated ring systems, e.g. (but not limited to) naphthyl, phenanthryl, anthracenyl, quinolyl, isoquinolyl, or indolyl.

(1:15-42); wherein U=S,

R₆=Me, R₃=alkyl having a fused C₀₋₇ cycloalkyl ring R₁=R₂=R₄=R₅=H (2:60-67; 3:6-12; 4:48-46; 6:50-59).

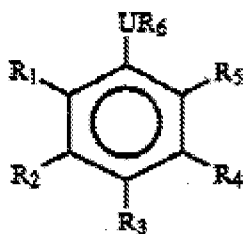
The Office realizes that all the claimed effects or physical properties are not positively stated by the reference. However, the reference teaches all of the claimed reagents. Therefore, the claimed effects and physical properties, i.e. spicy and anisic odor notes, would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicants' position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects with only the claimed ingredients.

Art Unit: 1796

Regarding claims 3-4 and 6-7: Köhler *et al.* teaches alkylphenyl alkyl thioethers as fragrances [instant claims 3-4] (5:42-45) and stabilizers for oils used in food and feed [instant claims 6-7] (5:42-45).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Köhler *et al.* (US 5,387,718).

Regarding claim 8: Köhler *et al.* teaches alkylphenyl alkyl thioethers having the general formula:



where U represents O or S; and

R_1 - R_6 each independently represent an alkyl or aryl group, but R_1 - R_5 may each independently represent a functional group other than these, including, e.g., but not limited to, $-\text{COOR}$, $-\text{NO}_2$, $-\text{NH}_2$, $-\text{O}-\text{CH}_2-\text{CH}_2-\text{OH}$, $-\text{OH}$, $-\text{CHO}$, or -halogen; further

R_1 - R_5 may be bridged by suitable bifunctional substituents, such as, e.g., $-(\text{CH}_2)_x-$, or $-(\text{CH}_2)_x-\text{Z}-(\text{CH}_2)_y-$ (where Z represents a hetero atom; $x=0-7$, and $y=0-7$), or preferably unsaturated substituents such as are characteristic of anellated ring systems, e.g. (but not limited to) naphthyl, phenanthryl, anthracenyl, quinolyl, isoquinolyl, or indolyl.

(1:15-42); wherein U=S,

$R_6=\text{Me}$, $R_3=\text{alkyl}$ having a fused C_{0-7} cycloalkyl ring $R_1=R_2=R_4=R_5=\text{H}$ (2:60-67; 3:6-12; 4:48-46; 6:50-59).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Köhler *et al.* (US 5,387,718) as applied to claim 4 above, and further in view of Grab *et al.* (EP 1264547).

Regarding claim 5: Köhler *et al.* renders the basic composition obvious [as set forth above with respect to claim 4].

Köhler *et al.* does not teach household product containing alkylphenyl alkyl thioethers. However, Grab *et al.* teaches flavor and fragrance compositions {household products} containing 1-mercapto-1-phenylalkanes which have a natural spicy character (¶ 1-2). Köhler *et al.* and Grab *et al.* are analogous art because they are concerned with a similar technical difficulty, namely the preparation of spicy fragrances composed of aryl thioethers. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined household products containing spicy fragrances composed of aryl thioethers, as taught by Grab *et al.* in the invention of Köhler *et al.*, and would have been motivated to do so since Grab *et al.* suggests that such aryl thioethers provide household products with a clear natural spicy character without any attendant dominant roasted note or accompanying pungent and putrid notes (¶ 5), and is an equivalent alternative means of providing spicy fragrances composed of aryl thioethers.

Allowable Subject Matter

Claims 2 and 9-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Köhler *et al.* does not specifically disclose the 1-cyclo{C₃₋₆}alkylmethyl -4-methylsulfanyl-benzenes of instant claims 2 and 9. Black *et al.* (US 6,222,048) discloses cyclopentyl-(4-(methylthio)phenyl)-methanone, prepared by a Friedel-Crafts acylation of thioanisole with cyclopentanecarbonyl chloride {precursor to 1-cyclopentylmethyl -4-methylsulfanyl-benzene}, but there would be no motivation to reduce the ketone to afford 1-cyclopentylmethyl -4-methylsulfanyl-benzene.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. See attached form PTO-892.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PEPITONE whose telephone number is (571)270-3299. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARK EASHOO, Ph.D./
Supervisory Patent Examiner, Art Unit 1796
18-Jul-08

MFP
15-July-08